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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LONG, HEATHER R

ART UNIT PAPER NUMBER

2615

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,036

Applicant(s)

SPENCER, SIMON H

Examiner

Heather R Long

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 23 and 31-33 is/are rejected.
- 7) ☒ Claim(s) 20-22 and 24-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2001 and 18 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/18/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed November 18, 2004 have been fully considered but they are not persuasive.

The Applicant argues that Kuribayashi fails to disclose "stripes inclined to the lines of the image". The Examiner respectfully disagrees. Kuribayashi discloses a light blocking unit that has a shutter function for selectively transmitting or blocking the light to any position on the image pickup plane (page 4, lines 25-30). Therefore, by the light blocking unit being able to selectively block light in any block of the light blocking unit it would be possible to create stripes (vertical columns) that would block light on the image pickup plane. Furthermore, the stripes would be inclined to the lines of the image meaning that the stripes are at an angle (90 degrees) to the horizontal lines of the image.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 18, 23, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuribayashi (JP 02076481) (*references to page and line numbers are according to the English translation*).

Regarding claim **18**, Kuribayashi discloses a camera, comprising: a sensor (12) for receiving radiation representative of a scene (page 5, lines 18-

21); filter means (14) for attenuating the radiation reaching different spatial regions of the sensor (12) to different extents (page 5, line 23 – page 6, line 3); and decoding means (15) for combining contributions to an output of the sensor (12) from the different spatial regions (page 6, lines 4-15), to produce a camera output representative of lines of an image of the scene of extended dynamic range (page 5, lines 18-21; page 6, line 23 - page 7, line 23), the filter means (14) comprising stripes orientated so that lines of the stripes are inclined to the lines of the image in that they form vertical stripes (see Fig. 2).

Regarding claim **23**, Kuribayashi discloses a camera, in which the stripes are opaque (Constitution; page 5, line 25 – page 6, line 3).

Regarding claim **31**, Kuribayashi discloses a camera, in which the sensor (12) is a charge coupled device (page 5, lines 18-21).

Regarding claim **33**, Kuribayashi discloses a camera, comprising: a sensor (12) for receiving radiation representative of a scene (page 5, lines 18-21); filter means (14) for attenuating the radiation reaching different spatial regions of the sensor (12) to different extents (page 5, line 23 – page 6, line 3); and decoding means (15) for combining contributions to an output of the sensor (12) from the different spatial regions, to produce a camera output representative of lines of an image of the scene of expanded contrast (It is inherent that the camera produces an output representative of expanded contrast because high intensity light is prevented from blurring the image) (page 6, line 23 - page 7, line

23), the filter means (14) comprising stripes orientated so that lines of the stripes are inclined to the lines of the image in that they form vertical stripes (see Fig. 2).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuribayashi as applied to claim 18 above.

Regarding claim **32**, claim 32 differs from Kuribayashi differs in that claim 32 further requires the sensor to include an image intensifier. Official Notice is taken that it is well known to use an image intensifier with the sensor in order to amplify the image signal for viewing low light level conditions. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used an image intensifier with the sensor to amplify the visible light from an image so that a dimly lit scene can be viewed by a camera or by an eye.

Allowable Subject Matter

6. Claims 20-22 and 24-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
1. The following is a statement of reasons for the indication of allowable subject matter: prior art fails to teach or fairly suggest a camera in which the sensor is

operative for producing the output representative of lines of an image of the scene, and in which the filter means comprises stripes orientated so that lines of the stripes are inclined to the lines of the image, wherein...

- a. ...the stripes are inclined at an angle within a range of $\pm 45^\circ$ to $\pm 80^\circ$ to the lines of the image (claim 20).
- b. ...the stripes are at approximately $\pm 45^\circ$ to the lines of the image (claim 21).
- c. ...the stripes are neutral density stripes (claim 22).
- d. ...the stripes are colored (claim 24).
- e. ...the regions between the stripes are polarizing (claim 25).
- f. ...the regions between the stripes are transparent (claim 26).
- g. ...there is a plurality of sets of stripes, each having different attenuating properties and being inclined at different angles to the lines of the image (claim 27).
- h. ...the decoding means is operative for combining successive lines of the image to reinforce the image and cancel the contributions to an intensity of the stripes (claim 28).
- i. ...the decoding means is operative for combining successive lines of the image to cancel the contributions to an intensity of the image and reinforce an intensity of the stripes (claim 29).
- j. ...the decoding means comprises at least one comb filter (claim 30).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R Long whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Long
Examiner
Art Unit 2615

HRL
April 12, 2005


TUAN HO
PRIMARY EXAMINER